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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,005	09/26/2000	David Darras	Q60875	3841

7590 12/17/2002

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2100 Pennsylvania Avenue NW  
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EXAMINER
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MIGGINS, MICHAEL C

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 12/17/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/647,005

Applicant(s)

DARRAS ET AL.

A 5-8

Examiner

Michael C. Miggins

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 October 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 25-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Election/Restrictions***

1. The election/restriction previously set forth in paper #6, pages 2-3, paragraphs 1-2 has been withdrawn since applicant has canceled non-elected claims 9-24.

## **REJECTIONS WITHDRAWN**

2. The 35 USC 112 2<sup>nd</sup> paragraph rejection of claim 6 (only) set forth in paper #6, pages 4-5, paragraphs 5-6 has been withdrawn.

## **REJECTIONS REPEATED**

3. The 35 USC 112 1<sup>st</sup> and 2<sup>nd</sup> paragraph rejections, except for the 112 2<sup>nd</sup> paragraph rejection of claim 6 which has been withdrawn (see above), are repeated for the reasons previously of record in paper #6, pages 3-5, paragraphs 3-6. The 35 USC 103(a) rejections are repeated for the reasons previously of record in paper #6, pages 5-8, paragraphs 7-9.

## **NEW REJECTIONS**

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagashima (EP 0 773 166 A1) in view of Danzer et al. (*Thin Solid Films*, vol. 219, pages 119-128).

Nagashima teaches a container (20 from Fig. 1) which is a bottle or flask, made from a material with a barrier effect and a polymer material (column 3, lines 35-53), wherein the material with a barrier effect is an amorphous carbon material which is applied as a coating on a substrate of polymer material (column 3, lines 35-53), wherein the polymer material is a polyolefin or a polyester, in particular PET or PEN (column 4, lines 4-15), wherein the barrier coating is applied to the substrate inside the container (column 4, lines 20-31) (applies to instant claims 25-28).

Note that claims 25-28 contain limitations which were previously recited in original claims 1 (bottle or flask) and claim 6 (polymer material is polyester, wherein polyester is PET or PEN).

#### **ANSWERS TO APPLICANT'S ARGUMENTS**

6. Applicant's arguments filed 10/7/02 have been carefully considered but are deemed unpersuasive. Applicant's arguments with regards to the 35 USC 112 2<sup>nd</sup> paragraph rejection of claim 6 has been considered but is moot since the rejection has been withdrawn.

Applicant has argued with regards to the remaining 112 1<sup>st</sup> and 2<sup>nd</sup> paragraph rejections of record that the nanocomposite (also called DLN) is well known in the art. While applicant's argument that a patent application need not teach, and preferably

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omits, that which is known in the art, has some merit, it is common practice under such guidelines to incorporate by reference publications etc. that detail that which is well known in the art. In the instant application, there is nothing on record which provides any details about the types of nanocomposites to which applicant refers and one of ordinary skill in the art would have no idea based on applicant's original disclosure just what types of nanocomposites applicant is claiming and therefore one of ordinary skill in the art would not be able to prepare the nanocomposites applicant is claiming. Because one of ordinary skill in the art would not be able to prepare and/or use applicant's claimed nanocomposites, the claims are not enabled.

With regards to the 103(a) rejections of record applicant has argued that while Danzer teaches the use of polymer-like amorphous carbon as intermediate layers, Danzer teaches that the use said polymer-like amorphous carbon intermediate layers is to improve mechanical properties and therefore Danzer does not teach a polymer-like amorphous carbon layer as a barrier coating on a substrate.

In response to applicant's argument that the polymer-like amorphous carbon layer of Danzer is used to improve mechanical properties and not as a barrier, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Furthermore, the polymer-like amorphous carbon is inherently a barrier layer since it is the exact same layer as that which is claimed by applicant. Therefore once the teachings of Nagashima and Danzer are combined, the motivation

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being to improve the mechanical properties of Nagashima by incorporating the polymer-like amorphous carbon of Danzer as an intermediate layer in the invention of Nagashima, a barrier coating is obtained since a polymer-like amorphous carbon layer is inherently a barrier layer.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is (703) 305-0915. The examiner can normally be reached on Monday-Friday; 1:30-10:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pyon Harold can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

MCM *MCM*  
December 12, 2002

*[Signature]*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER *12/16/02*  
*1772*